

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

- 1-7. (Cancelled).
8. (Previously Presented) A method for genotypically diagnosing if an individual is at risk to develop cavernomas, wherein the method comprises providing a biological sample from said individual, and detecting the presence of a mutation in a *Krit1* gene nucleic acid sequence present in said sample, said mutation giving rise to a truncated Krit1 protein, wherein said mutation is linked to the occurrence of cavernomas.
9. (Previously Presented) The diagnostic method as claimed in claim 8, wherein the nucleic acid sequence is genomic DNA, cDNA or mRNA.
10. (Previously Presented) The diagnostic method as claimed in claim 8, wherein said detecting comprises hybridization.
11. (Previously Presented) The diagnostic method as claimed in claim 8, wherein said detecting comprises sequencing.

12. (Previously Presented) The diagnostic method as claimed in claim 8, wherein said detecting comprises SSCP or DGGE.

13. (Previously Presented) The diagnostic method as claimed in claim 8, wherein said detecting comprises detecting the truncation of a protein.

14. (Previously Presented) The diagnostic method as claimed in claim 8, wherein all or part of the nucleic acid sequence corresponding to the *Krit1* gene is amplified prior to detecting the presence of a mutation.

15. (Previously Presented) The diagnostic method as claimed in claim 14, wherein the amplification is carried out by PCR or PCR-like amplification.

16. (Currently Amended) The diagnostic method as claimed in claim 15, wherein the amplification is primed by a pair of nucleotide sequences ~~according to claim~~  
4 selected from the group consisting of:

SEQ ID No. 1 and SEQ ID No. 2,  
SEQ ID No. 3 and SEQ ID No. 4,  
SEQ ID No. 5 and SEQ ID No. 6,  
SEQ ID No. 7 and SEQ ID No. 8,  
SEQ ID No. 9 and SEQ ID No. 10,  
SEQ ID No. 11 and SEQ ID No. 12,  
SEQ ID No. 13 and SEQ ID No. 14,  
SEQ ID No. 15 and SEQ ID No. 16,  
SEQ ID No. 17 and SEQ ID No. 18,  
SEQ ID No. 19 and SEQ ID No. 20,  
SEQ ID No. 21 and SEQ ID No. 22,  
SEQ ID No. 23 and SEQ ID No. 24,

SEQ ID No. 25 and SEQ ID No. 26, and  
SEQ ID No. 27 and SEQ ID No. 28.

17-25. (Cancelled).

26. (Previously Presented) The diagnostic method as claimed in claim 8, wherein said *Krit1* gene mutation is detected in at least one exon of the *Krit1* gene.

27. (Currently Amended) The diagnostic method as claimed in claim 8, wherein the mutation giving rise to a truncated Krit1 protein, which is detected, is selected from 1342 Del (A), 1283 C → T, 247 Ins (C), 261 G → A, 1012 Del (26 bp), 615 G → A, 681 Del (GAA<sub>t</sub>) and 1271 Ins (C).

28. (Previously Presented) The diagnostic method as claimed in claim 8, wherein the truncating mutation which is detected is responsible for the appearance of a familial form of cerebral cavernous malformation.